

IIT Hyderabad and Marvell launched World's First Data Acceleration and Offload Research Facility at IIT Hyderabad to Drive AI and Data Infrastructure Innovation

Highlights:

- *IIT Hyderabad (IITH) and Marvell Technology inaugurate the world's first Data Acceleration and Offload Research Facility at IIT Hyderabad.*
- *The facility aims to provide access to Marvell's DPUs, switches, CXL processors, and NICs, accelerating advancements in AI, Networking, and Security.*
- *Research shows up to one-third of AI/ML processing time is spent waiting for network access—this initiative aims to tackle that inefficiency.*
- *The facility strengthens India's role in the global Semiconductor and AI ecosystem, fostering next-gen tech talent.*

Hyderabad, 21st February, 2025: Indian Institute of Technology Hyderabad (IITH) has inaugurated the Marvell® Data Acceleration and Offload Research Facility at IITH in collaboration with Marvell Technology, Inc. (NASDAQ: MRVL), a leader in data infrastructure Semiconductor solutions. This pioneering center is dedicated to advancing Network, Storage, and Security technologies, aiming to enhance the performance of accelerated data infrastructure.

The Marvell Data Acceleration and Offload Research Facility, the first of its kind globally, offers students, researchers, and industry professionals access to state-of-the-art Marvell technologies. These include Data Processor Units (DPUs), Switches, Compute Express Link (CXL) Processors, and Network Interface controllers (NICs). These resources are essential for accelerating Data security, Movement, Management, and processing across AI clusters, Cloud environments, and Networks. Industry research indicates that up to one-third of AI/ML processing time is spent waiting for network access and this initiative aims to tackle that inefficiency. A key feature of the facility is the availability of Marvell's comprehensive software solution frameworks, optimized for developing solutions that leverage Integrated packet processing, Cryptography, and AI/ML accelerators within Marvell silicon.

The establishment of the Marvell Data Acceleration and Offload Research Facility follows the successful MLNetSec Workshop co-hosted by IITH and Marvell at the 26th International Conference on Distributed Computing and Networking (ICDCN) earlier this year. The workshop addressed key challenges in AI, Networking, and Cryptography, underscoring the importance of accelerated compute solutions in both academic and industrial research.

IITH and Marvell are committed to ongoing collaboration through joint courses, hands-on training, and research initiatives leveraging the facility's advanced infrastructure. Plans include hosting specialized workshops, conferences, and training sessions to foster innovation and empower future tech leaders in developing solutions for the evolving landscape of data infrastructure.

Prof. BS Murty, Director, IITH congratulated the team and emphasized that this partnership aligns with IITH's commitment to advancing technological research and education, positioning the institute at the forefront of accelerated infrastructure development.

Cary Ussery, Senior Vice President at Marvell, emphasized the significance of this collaboration: *"The partnership between Marvell and IIT Hyderabad exemplifies the impact of academia-industry collaboration. By providing access to cutting-edge technologies, this*

initiative accelerates advancements in AI, Networking, and Storage, empowering the next generation of tech leaders to drive breakthroughs in data infrastructure."

Prasun Kapoor, Associate Vice President of Custom Compute and Storage at Marvell, added: *"As cloud and AI infrastructure grow in complexity and scale, the need for innovation in technologies managing data flow between Servers, Processors, and Devices becomes paramount. Technologies such as DPUs, NICs, and interconnects will play a significant role in the evolution of AI. We look forward to deepening our collaboration with IIT Hyderabad and witnessing the outcomes of this initiative."*

Prof. Antony Franklin, Head of the Department of Computer Science and Engineering at IITH, highlighted the facility's potential: *"This research facility enables our students and researchers to engage with advanced technologies. It also establishes a platform for interdisciplinary research in emerging fields like AI/ML, Accelerated computing, Advanced encryption algorithms, and Network acceleration, paving the way for the next generation of technological innovation."*

Dr. Praveen Tammana, Assistant Professor, Department of Computer Science and Engineering at IITH, noted: *"The research facility will enable Marvell and IITH to conduct cutting-edge research and bridge the skill gap at the intersection of AI, Systems, Security, and Networks."*

About Marvell:

To deliver the data infrastructure technology that connects the world, they're building solutions on the most powerful foundation: their partnerships with their customers. Trusted by the world's leading technology companies for over 25 years, they move, store, process and secure the world's data with Semiconductor solutions designed for their customers' current needs and future ambitions. Through a process of deep collaboration and transparency, they're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.

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About IIT Hyderabad:

IITH, established in 2008, as one of the second Generation IITs, has reached a respectable position in both academics, research, technology development and startups in the short span of 16 years. In the Indian National Ranking (NIRF), IITH is placed 3rd in Innovation (for both 2023 & 2024) and 8th among Engineering institutes in India (since 2019, except 2022).

It has 325+ full-time faculty, 5,350+ students (PG+PhD students accounting for about 60%). The institute has a strong research focus with Rs. 1400+ Cr of R&D funding (Rs. 250 Cr funding in 2023-24), 11,500+ publications, 460+ Patents (210 patents in 2024), and about 260+ startups (that have generated 1100+ jobs and a revenue of Rs. 1500+ Cr). Follow us on [Instagram](#), [LinkedIn](#), [Twitter](#), [Facebook](#), and [YouTube](#) for the latest updates.

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